offset each other, as in the **casting** of high-Cr steels having high volume expansion. The shrinkage volume change is 1-5 volume% in the crystalline temperature range. Porosity and hot cracking increase with increase in shrinkage volume

ST **casting** steel shrinkage riser mold

IT **Casting** process
(of steels, feeding effect on solidification shrinkage in)

IT 62395-06-6
RL: USES (Uses)
(**casting** of austenitic, feeding effect on solidification shrinkage in)

IT 89382-40-1
RL: USES (Uses)
(**casting** of ferritic, feeding effect on solidification shrinkage in)

IT **63850-89-5** 89256-76-8 89382-39-8, properties
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(**casting** of, feeding effect on solidification shrinkage in)

L11 ANSWER 49 OF 71 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:544147 CAPLUS
DN 99:144147
ED Entered STN: 12 May 1984
TI **Cast** iron
IN Dovgopol, V. I.; Filippenkov, A. A.; Parshin, V. A.; Filippov, A. S.; Medvedev, A. A.; Puzyr'kov-Uvarov, O. V.; Kutafin, A. K.; Kravets, K. F.; Budag'yants, N. A.; et al.
PA Ural Scientific-Research Institute of Ferrous Metals, USSR; Ukrainian Scientific-Research Institute of Metals
SO U.S.S.R.
From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1983, (24), 75-6.
CODEN: URXXAF
DT Patent
LA Russian
IC C22C037-10
CC 55-3 (Ferrous Metals and Alloys)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI SU 1025750	A1	19830630	SU 1981-3357466	19811126
PRAI SU 1981-3357466		19811126		

AB The **cast** iron [**87193-86-0**] with increased strength, heat stability, and as-**cast** crack resistance contains Cu 0.02-2, Mo 0.01-0.6 and Ca 0.0001-0.01% in addition to C 2.7-3.9, Si 0.35-2, Mn 0.2-1.2, Cr 0.05-2, Ni 0.05-3.6, V 0.03-0.5, and N 0.005-0.035%.

ST **cast** iron calcium copper; molybdenum **cast** iron property

IT 7440-70-2, uses and miscellaneous 7727-37-9, uses and miscellaneous
RL: USES (Uses)
(in **cast** iron, mech. properties in relation to)

IT **87193-86-0**
RL: USES (Uses)
(mech. properties of **cast**)

IT 11097-15-7, properties
RL: PRP (Properties)
(mech. properties of, alloying effect on)

L11 ANSWER 50 OF 71 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:621309 CAPLUS
DN 97:221309
ED Entered STN: 12 May 1984
TI Study of antifriction characteristics and wear resistance of materials in nonflammable hydraulic fluids
AU Matsak, A. T.; Mozharov, M. V.; Svinarev, I. G.
CS Khar'k. Avtomob.-Dorozhn. Inst., Kharkov, USSR
SO Trenie i Iznos (1982), 3(3), 553-8
CODEN: TRIZD6; ISSN: 0202-4977
DT Journal
LA Russian
CC 56-10 (Nonferrous Metals and Alloys)
AB Antifriction and antiwear properties of steels, bronzes, and modified **cast** irons were investigated during friction in aqueous emulsions containing 2% E-2 and VNIINP-117 liqs. or in a water-glycerol mixture